Panasonic

DIGITAL

Production Mixer
WJ-MX10

SUPERIMPOSE EFFECT
ON
KEY LEVEL
COLOUR SELECT
TITLE EFFECT
REVERSE
SOURCE
VIDEO 1
VIDEO 2
EXT CAMERA
FADE CONTROL
AUDIO MIXER
MIC
AUX
AUDIO
BALANCE
AUDIO 1
AUDIO 2
DIGITAL FRAME SYNCHRONIZER
STILL
STROBE
MOSAIC
PAINT
MIN
MAX
SMALL
LARGE
LOW
MIX WIPE EFFECT
A
B
BACK COLOUR
VIDEO 2
VIDEO 1
MIX
WIPE
ON
BACK COLOUR
MAGENTA
RED
BLUE
BLACK
GREEN
CYAN
YELLOW
WHITE
POSITIONER

The Panasonic WJ-MX10 production mixer was designed for cr

The WJ-MX10 is an easy to use digital production mixer that lets of video professionals, or just about any A/V enthusiast, achieve video production effects. It features a built-in digital frame synchronizer, so it can edit video signals ...such as from cameras or VTRs without a time-base corrector.
The WJ-MX10 delivers a wide variety of special effects, including superimposition and wiping, and it lets you create special digital effects like still frame, stroboscope, mosaic and paint.

KEY FEATURES

●Built-in digital frame synchronizer
Because the WJ-MX10 has a built-in digital frame synchronizer, it can easily mix such non-synchronized signals as the output from video tape decks, video cameras and TV tuners, without the need for time base correctors.

●Special effects
The built-in frame memory of the WJ-MX10 makes it easy to use a variety of special effects for video production, including digital processing special effects such as:
•Still frame the picture
•Stroboscope with an interval adjustable up to 2 seconds
•5-level mosaics
•7-level adjustable painting

●Wipe patterns
Seventeen (17) different wipe effect patterns can be obtained by combining the wipe selector buttons. In addition, a joystick can be used to move square or round wipe screens to any position on the TV screen.

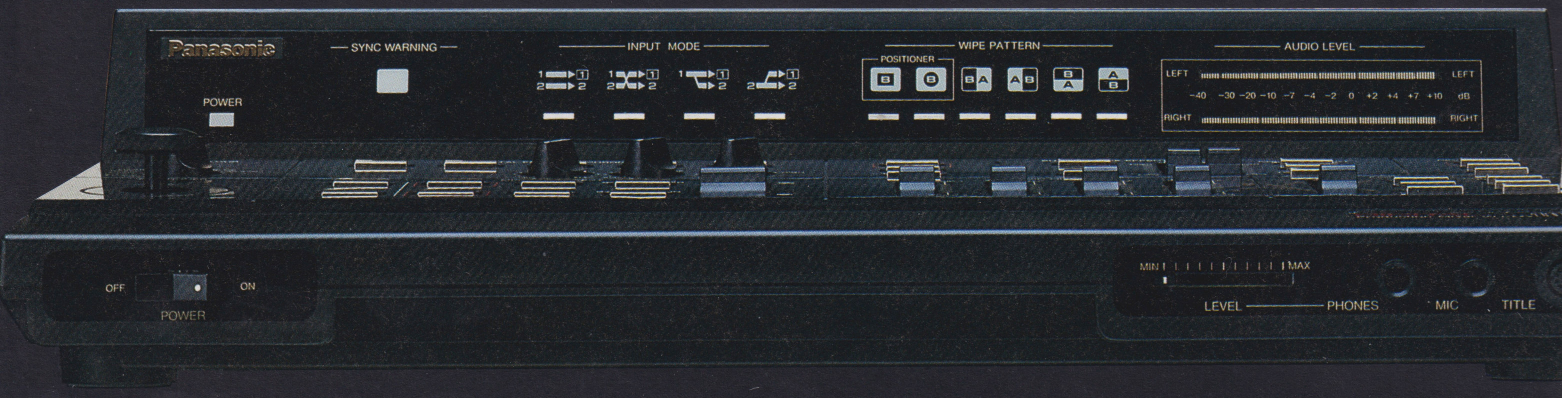
●Superimposition function
With the WJ-MX10, you can select one of three video Inputs—Video 1, Video 2, or External Camera—for superimposition. Both the shadow effect, which gives the superimposed characters depth, and the edging effect can be used with the superimposition function to increase video production creativity.

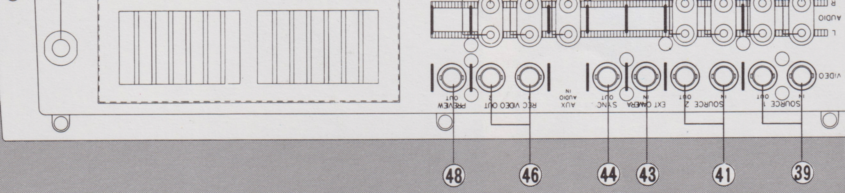
The optional WV-KB12 keyboard-type character input device enables fast, simple title production. If features a storage function for up to 8 pages of titles, plus a 1-page, 40-line scroll function. In addition, shadows and edging can be used in creating title characters.

●8-colour background colour selection
Any one of eight colours (white, yellow, cyan, green, magenta, red, blue and black) can be selected as the background colour for superimposition, mixing, wiping and video fading.

●Audio mixnig
The WJ-MX10 has a built-in audio mixer for mixing 4 audio inputs includig mic input. In addition, the easy-to-read audio level meter and its headphone output enable instant checking and monitoring of the audio level.

●Fade function
The fade-in and fade-out functions can be used alone or together for video, audio and video title signals.




AUDIO
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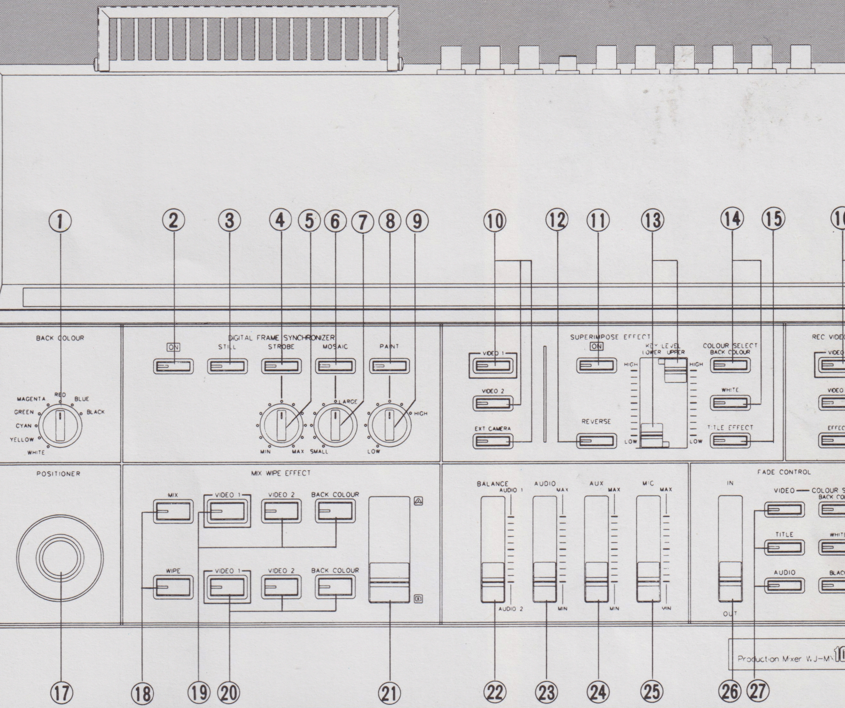
VIDEO
PREVIEW OUT
REC VIDEO OUT 2 1
AUX AUDIO IN
SYNC OUT
EXT CAMERA IN
SOURCE 2 OUT IN
SOURCE 1 OUT IN
48
46
44
43
41
39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BACK COLOUR
MAGENTA
RED
BLUE
GREEN
BLACK
CYAN
YELLOW
WHITE
DIGITAL FRAME SYNCHRONIZER
ON
STILL
STROBE
MOSAIC
PAINT
MIN
MAX
SMALL
LARGE
LOW
HIGH
VIDEO 1
VIDEO 2
EXT CAMERA
SUPERIMPOSE EFFECT
ON
REVERSE
KEY LEVEL
LOWER UPPER
HIGH
LOW
COLOUR SELECT
BACK COLOUR
WHITE
TITLE EFFECT
REC VIDEO
POSITIONER
MIX WIPE EFFECT
MIX
WIPE
VIDEO 1
VIDEO 2
BACK COLOUR
A
B
BALANCE
AUDIO 1
AUDIO 2
AUDIO
AUX
MIC
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MIN
FADE CONTROL
IN
OUT
VIDEO
COLOUR S
BACK CO
TITLE
WHITE
AUDIO
BLAC
Production Mixer WJ-MX10
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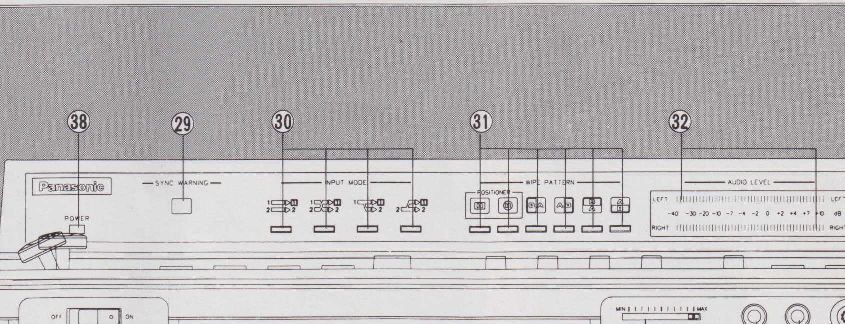
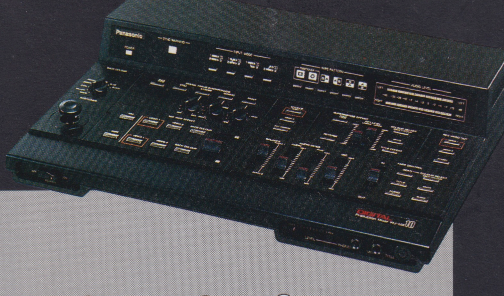
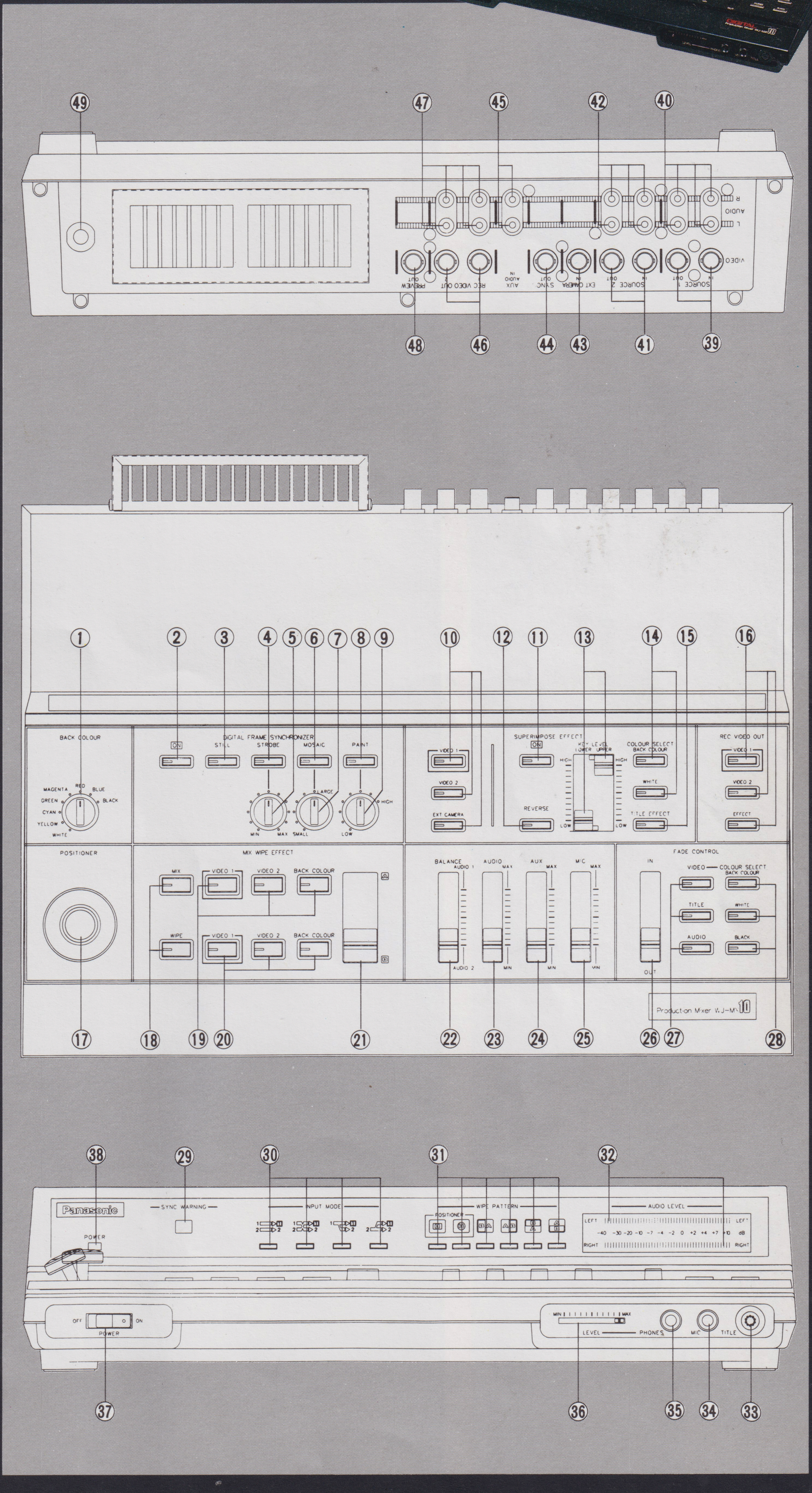

38
29
30
31
32
Panasonic
SYNC WARNING
POWER
INPUT MODE
WIPE PATTERN
POSITIONER
AUDIO LEVEL
LEFT
-40 -30 -20 -10 -7 -4 -2 0 +2 +4 +7 +10 dB
RIGHT
OFF
ON
MIN
MAX

eative and effective audio/video mixing.



MAJOR OPERATING CONTROLS AND THEIR FUNCTIONS



PREVIEW OUT
REC VIDEO OUT
AUX AUDIO IN
SYNC OUT
EXT CAMERA IN
SOURCE 2
SOURCE 1
VIDEO
AUDIO
R
L
BACK COLOUR
MAGENTA
RED
BLUE
GREEN
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CYAN
YELLOW
WHITE
DIGITAL FRAME SYNCHRONIZER
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MAX
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VIDEO 1
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MIX WIPE EFFECT
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IN
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TITLE
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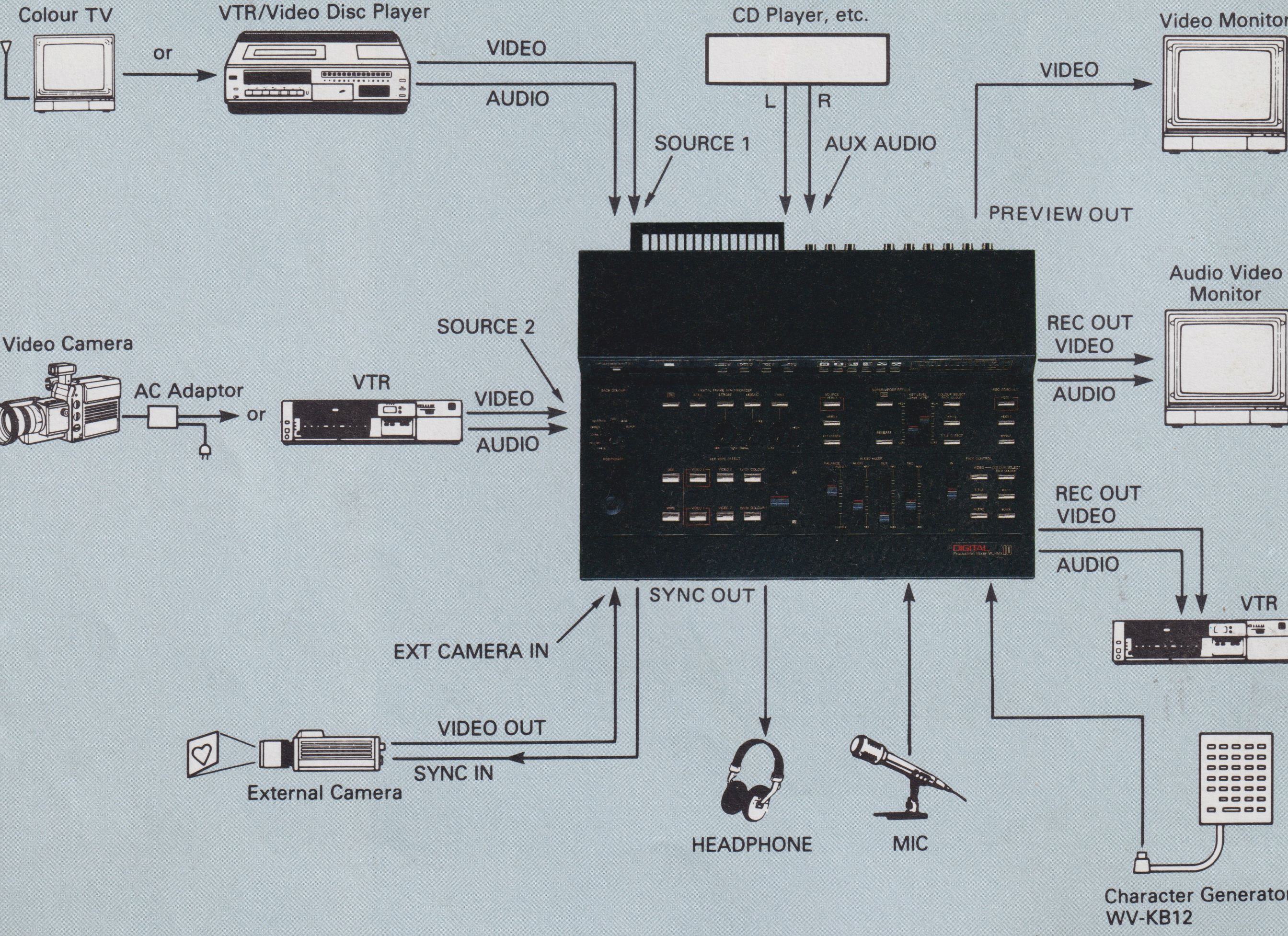
Production Mixer WJ-MX10
Panasonic
POWER
SYNC WARNING
INPUT MODE
POSITIONER
WIPE PATTERN
AUDIO LEVEL
LEFT
RIGHT
-40 -30 -20 -10 -7 -4 -2 0 +2 +4 +7 +10 dB
OFF
ON
MIN
MAX
LEVEL
PHONES
MIC
TITLE

1. Back Colour Selection Switch
2. Digital Effect ON/OFF Switch
3. Still ON/OFF Switch
4. Strobe ON/OFF Switch
5. Strobe Time Interval Control
6. Mosaic ON/OFF Switch
7. Mosaic Size Selection Control
8. Paint ON/OFF Switch
9. Paint Graduation Selection Control
10. Source Selection Switches
    (SOURCE, VIDEO 1/VIDEO 2/EXT CAMERA)
11. Superimpose ON/OFF Switch
12. Reverse Switch
13. Key Level Controls
14. Colour Selection Switches
15. Title Effect Switch
16. Recording Video Output Selection Switches
    (REC VIDEO OUT, VIDEO 1/VIDEO 2/EFFECT)
17. Joystick Positioner
18. Mix/Wipe Mode Selection Switches
19. A-bus Input Selection Switches
20. B-bus Input Selection Switches
21. Wipe/Mix Lever
22. Balance Control
23. Audio Level Control
24. Auxiliary Audio Level Control
25. Microphone Level Control
26. Fade Lever
27. Fade Control Switches
28. Colour Selection Switches
29. Sync Warning Indicator
30. Input Mode Selection Switches
31. Wipe Pattern Selection Switches
32. Audio Level Indicator
33. Title Input Connector
34. Microphone Input Jack
35. Headphone Jack
36. Headphone Level Control
37. Power ON/OFF Switch
38. Power Indicator
39. Source 1 Video Connectors
40. Source 1 Audio Connector
41. Source 2 Video Connector
42. Source 2 Audio Connectors
43. External Camera Input Connector
44. Sync Output Connector
45. Auxiliary Audio Input Connectors
46. Recording Video Output Connectors
47. Recording Audio Output Connectors
48. Preview Output Connector
49. Power Cord


Colour TV
or
VTR/Video Disc Player
VIDEO
AUDIO
CD Player, etc.
L
R
SOURCE 1
AUX AUDIO
Video Monitor
VIDEO
PREVIEW OUT
Audio Video Monitor
REC OUT VIDEO
AUDIO
Video Camera
AC Adaptor
or
VTR
SOURCE 2
VIDEO
AUDIO
DIGITAL
REC OUT VIDEO
AUDIO
VTR
SYNC OUT
EXT CAMERA IN
VIDEO OUT
SYNC IN
External Camera
HEADPHONE
MIC
Character Generator
WV-KB12

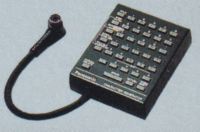
ECIFICATIONS PAL

urce Input:	X2 (SOURCE 1 and SOURCE 2)
ideo Input:	1.0 Vp-p/75 ohms or high impedance loop-through, PAL composite signal, BNC connectors
udio Input:	−10 dBV/15 kohms, pin jacks (Left and Right)
ernal Camera Input:	1.0 Vp-p/75 ohms CCIR or PAL composite signal, BNC connector ×1
c Output:	1.0 p-p/75 ohms, composite sync, BNC connector×1
cording Output:	×2 (REC OUT 1 and REC OUT 2)
Video Output:	1.0 Vp-p/75 ohms, PAL composite signal, BNC connectors
Audio Output	−8 dBV/1 kohms, pin jacks (Left and Right)
view Video Output:	1.0 Vp-p/75 ohms, PAL composite signal, BNC connector×1
ernal Sound Input:	
MIC Input (mono)	−60 dB/600 ohms, unbalanced, tip-ring-sleeve type phone jack×1
UX Input:	−10 dBV/15 kohms, pin jacks (Left and Right)
adphone Output:	−30 dB/8 ohms, (8 ohms—100 ohms), tip-ring-sleeve type phone jack×1
racter (TITLE) Input:	10-pin connector×1 for optional Character Generator WV-KB12
ects	
Video:)	Still, Strobe, Mosaic, Paint, Mix Wipe, Superimpose, Fade-in/out
Audio:)	Mix, Fade
ck Colours:	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black

Wipe Patterns:	Circle and Square with positioning, and 15 additional patterns without positioning
Wipe Positioner:	Built-in Joystick Positioner
Input Video Frequency Range:	Sync: 15.625 khz ± 300Hz, SC: 4.433619 MHz ± 40 Hz
Frequency Response:	3 MHz (−3 dB) (Video, Y signal), 20Hz — 20 kHz (−3dB) (Audio)
Maximum Resolution:	300 lines
Gain:	Unity (Video)
Signal-to-noise Ratio:	More than 46 dB (Video), 50 dB (Audio)
Differential Gain:	±10%
Differential Phase:	±7°
Power Source:	240 V AC, 50 Hz for WJ-MX10/A and WJ-MX 220 V AC 50 Hz for WJ-MX10/C and WJ-MX1
Power Consumption:	35 W
Ambient Temperature:	0°—40°C
Ambient Humidity:	Less than 90%
Dimensions:	420(W)×100(H)×327(D)mm
Weight	5.5 kg

OPTIONAL ACCESSORIES

- Character Generator WV-KB12



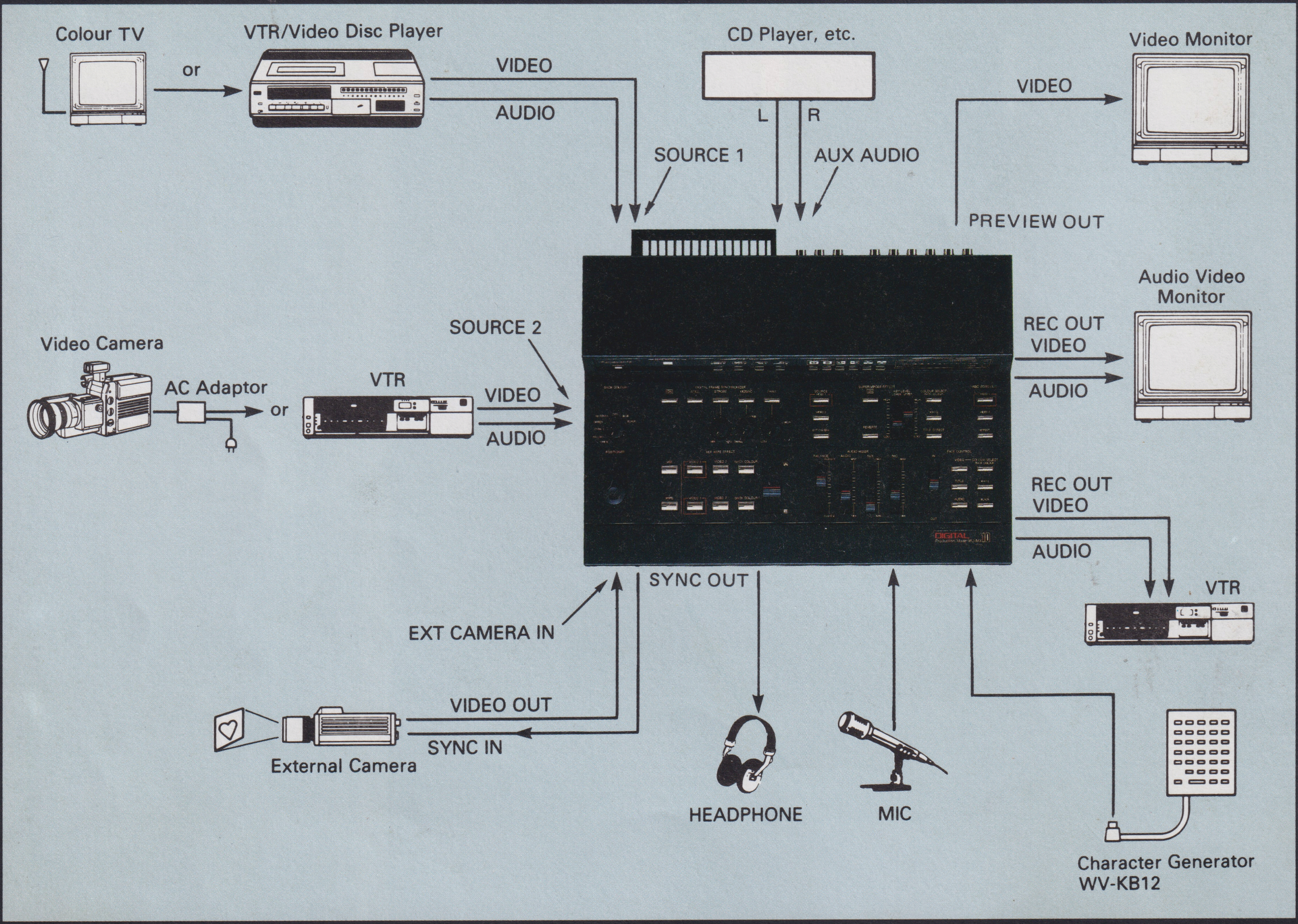
ISTRIBUTED BY:

$ ~~2450~~ ·00
~~$ 2660~~ · 00
CHARACTER GEN. ~~$300·00~~
$2440·00

~~$311·00~~
$254·00

Weight and dimensions shown are approx
Specifications subject to change without
All TV pictures are simulated.

SYSTEM CONNECTION


Colour TV
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VTR/Video Disc Player
VIDEO
AUDIO
SOURCE 1
CD Player, etc.
L
R
AUX AUDIO
Video Monitor
VIDEO
PREVIEW OUT
Video Camera
AC Adaptor
or
VTR
VIDEO
AUDIO
SOURCE 2
Audio Video Monitor
REC OUT VIDEO
AUDIO
REC OUT VIDEO
AUDIO
VTR
SYNC OUT
EXT CAMERA IN
VIDEO OUT
SYNC IN
External Camera
HEADPHONE
MIC
Character Generator WV-KB12

SPECIFICATIONS PAL

Source Input:	X2 (SOURCE 1 and SOURCE 2)
Video Input:	1.0 Vp-p/75 ohms or high impedance loop-through, PAL composite signal, BNC connectors
Audio Input:	−10 dBV/15 kohms, pin jacks (Left and Right)
External Camera Input:	1.0 Vp-p/75 ohms CCIR or PAL composite signal, BNC connector ×1
Sync Output:	1.0 p-p/75 ohms, composite sync, BNC connector×1
Recording Output:	×2 (REC OUT 1 and REC OUT 2)
Video Output:	1.0 Vp-p/75 ohms, PAL composite signal, BNC connectors
Audio Output	−8 dBV/1 kohms, pin jacks (Left and Right)
Preview Video Output:	1.0 Vp-p/75 ohms, PAL composite signal, BNC connector×1
External Sound Input:	
MIC Input (mono)	−60 dB/600 ohms, unbalanced, tip-ring-sleeve type phone jack×1
AUX Input:	−10 dBV/15 kohms, pin jacks (Left and Right)
Headphone Output:	−30 dB/8 ohms, (8 ohms—100 ohms), tip-ring-sleeve type phone jack×1
Character (TITLE) Input:	10-pin connector×1 for optional Character Generator WV-KB12
Effects	
(Video:)	Still, Strobe, Mosaic, Paint, Mix Wipe, Superimpose, Fade-in/out
(Audio:)	Mix, Fade
Back Colours:	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black

Wipe Patterns:	Circle and Square with positioning, and 15 additional patterns without positioning
Wipe Positioner:	Built-in Joystick Positioner
Input Video Frequency Range:	Sync: 15.625 khz±300Hz, SC: 4.433619 MHz±40Hz
Frequency Response:	3 MHz (−3 dB) (Video, Y signal), 20Hz—20 kHz (−3dB) (Audio)
Maximum Resolution:	300 lines
Gain:	Unity (Video)
Signal-to-noise Ratio:	More than 46 dB (Video), 50 dB (Audio)
Differential Gain:	±10%
Differential Phase:	±7°
Power Source:	240 V AC, 50 Hz for WJ-MX10/A and WJ-MX10/B; 220 V AC 50 Hz for WJ-MX10/C and WJ-MX10/G
Power Consumption:	35 W
Ambient Temperature:	0°—40°C
Ambient Humidity:	Less than 90%
Dimensions:	420(W)×100(H)×327(D)mm
Weight	5.5 kg

OPTIONAL ACCESSORIES

- Character Generator
  WV-KB12

DISTRIBUTED BY:

$ ~~2450~~ .00
~~$ 2660~~ .00
CHARACTER GEN. ~~$300.00~~
$2440.00

~~$311.00~~
$254.00

Weight and dimensions shown are approximate.
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National/Panasonic
National and Panasonic are the brandnames of Matsushita Electric.

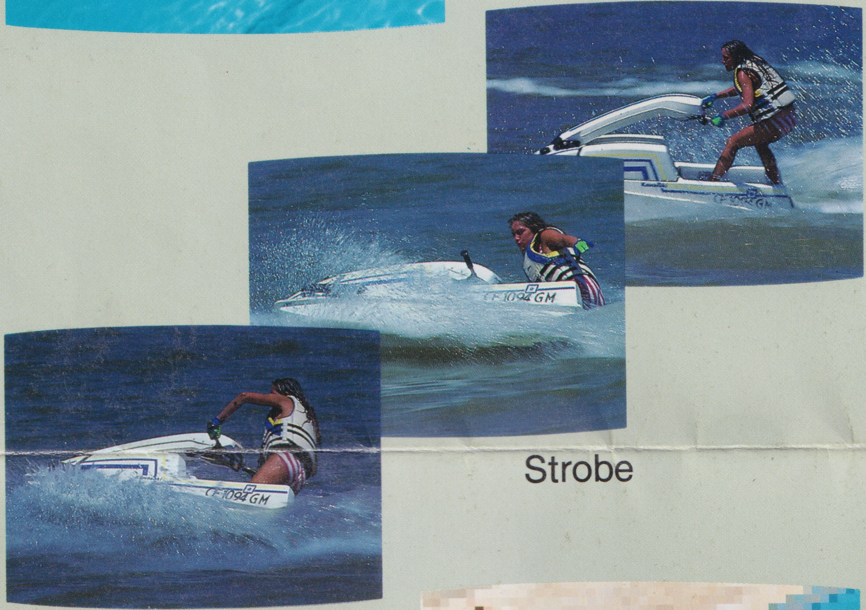
Printed in Japan
(N-234)

A full lineup of mixing

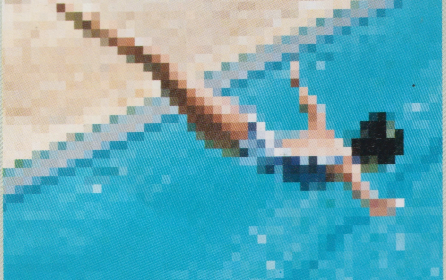
1 Digital frame synchronizer

Signals are processed through input 1, the digital frame synchronizer, to enable creative and effective video tape production featuring such special effects as still frame, stroboscope, mosaic and paint.

Still



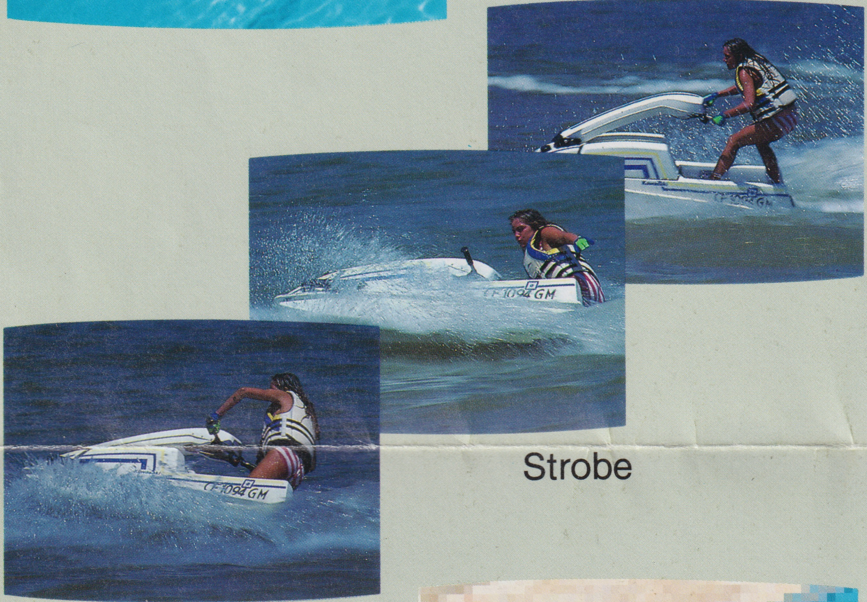
Strobe



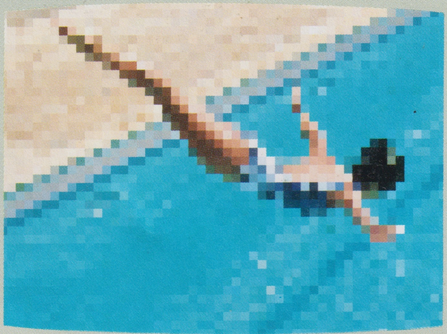
Mosaic

Panasonic
POWER
BACK COLOUR
MAGENTA
RED
BLUE
GREEN
BLACK
CYAN
YELLOW
WHITE
POSITIONER

Still

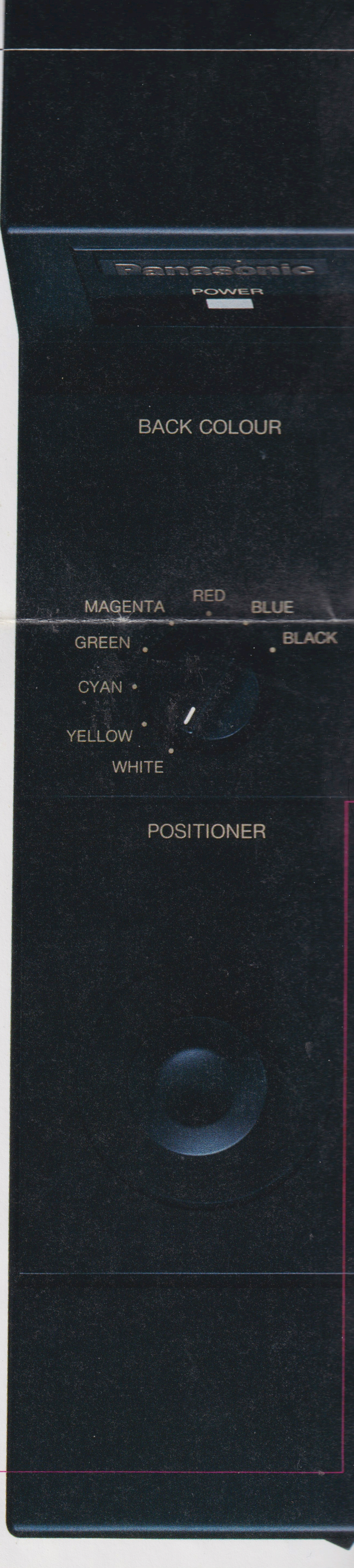


Strobe



Mosaic

Paint

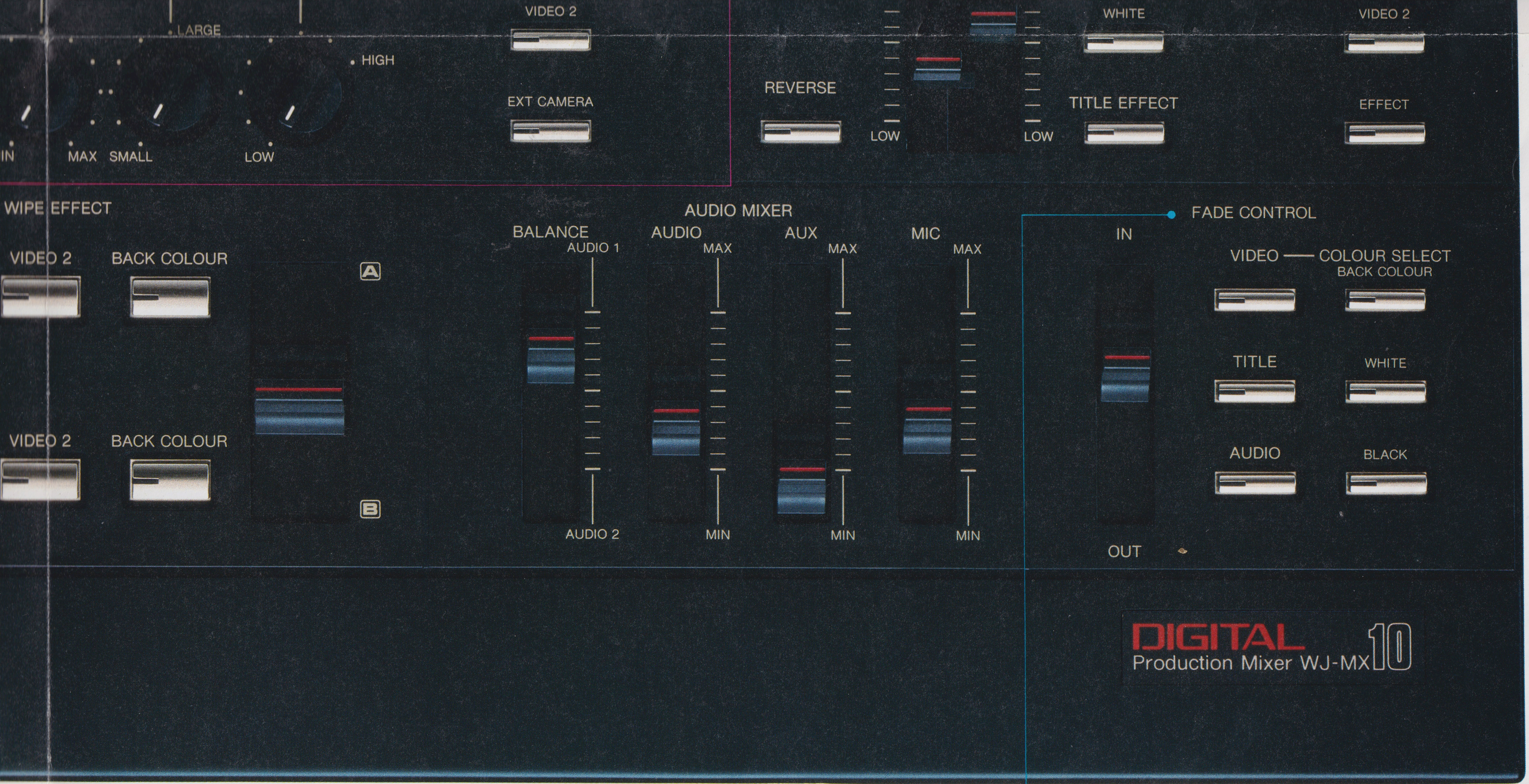

Panasonic
POWER
BACK COLOUR
MAGENTA
RED
BLUE
GREEN
BLACK
CYAN
YELLOW
WHITE
POSITIONER

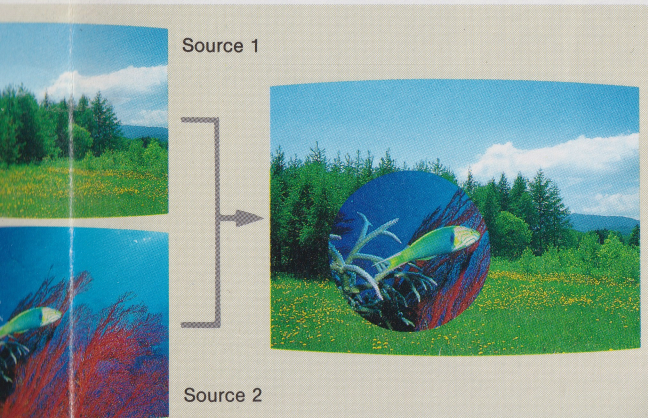
2 Superimposition function

With the WJ-MX10, you can select one of three video inputs, Video 1, Video 2, or external camera for superimposition. Superimposition is possible with simple operations such as reverse, key level control and colour selection. In addition, special effects such as shadowing and edging can

3 Wipe-m

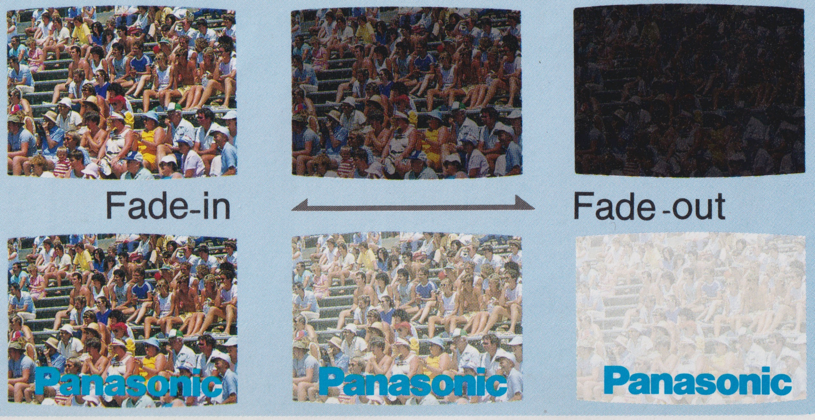
Because the WJ-MX
synchronizer, two dif
wiped even if they a
(17) different wipe ef
combining the wipe
round wipe screens
the TV screen with a

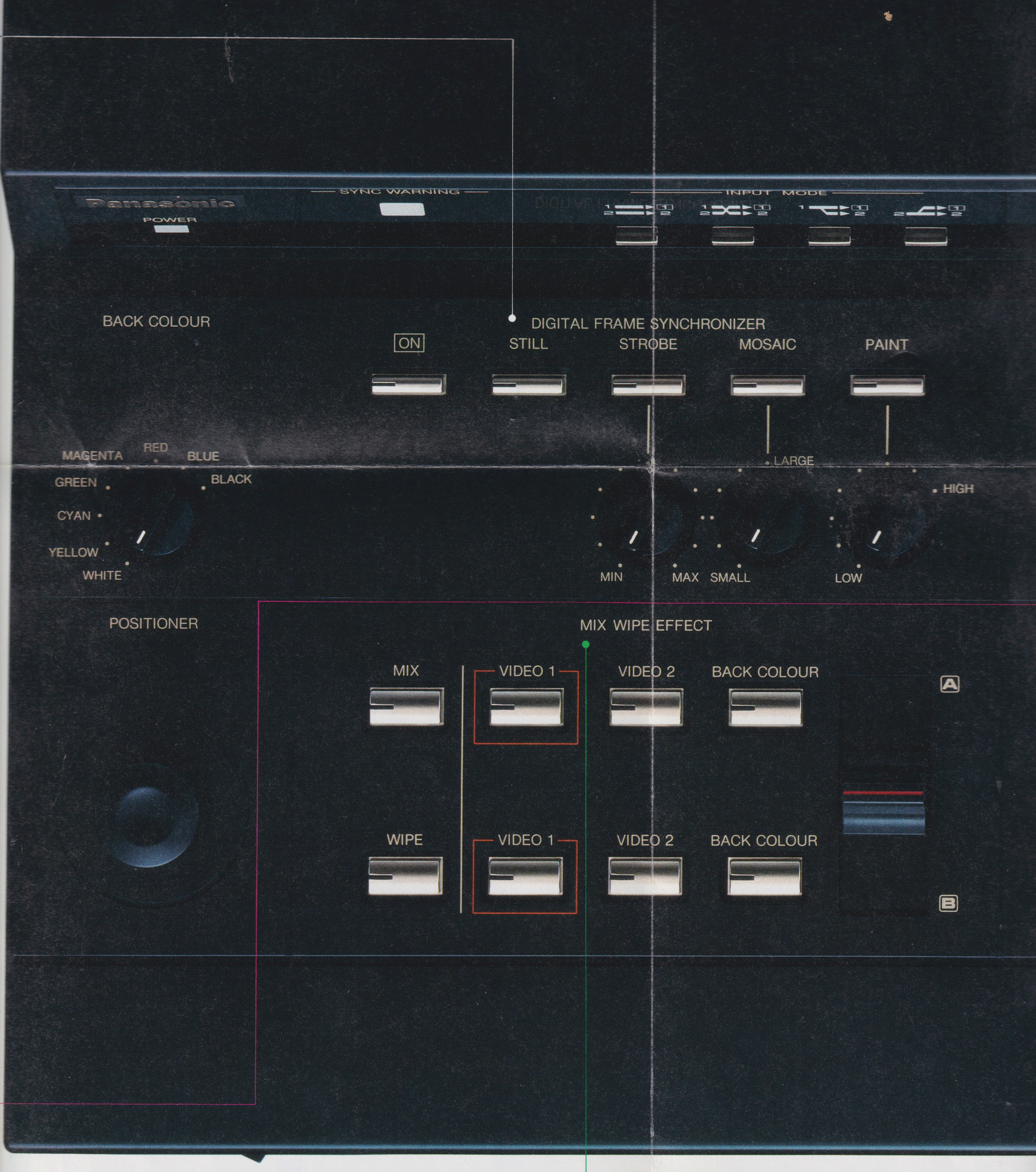

LARGE
HIGH
IN
MAX
SMALL
LOW
VIDEO 2
EXT CAMERA
REVERSE
LOW
LOW
WHITE
TITLE EFFECT
VIDEO 2
EFFECT
WIPE EFFECT
VIDEO 2
BACK COLOUR
VIDEO 2
BACK COLOUR
A
B
AUDIO MIXER
BALANCE
AUDIO 1
AUDIO 2
AUDIO
MAX
MIN
AUX
MAX
MIN
MIC
MAX
MIN
FADE CONTROL
IN
OUT
VIDEO — COLOUR SELECT
BACK COLOUR
TITLE
WHITE
AUDIO
BLACK
DIGITAL
Production Mixer WJ-MX10


Source 1
Source 2

4 Fade control

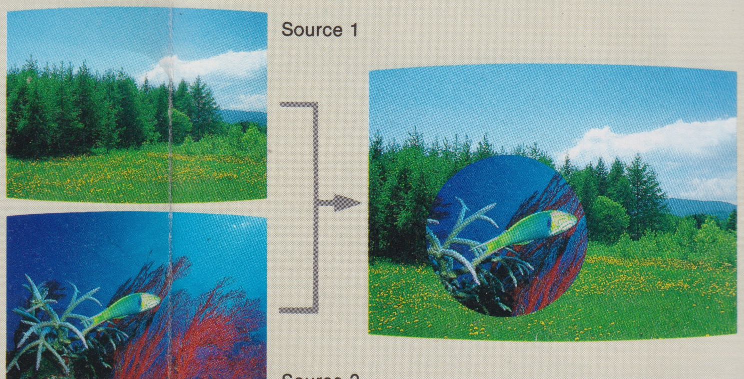
The fade-in and fade-out functions of the WJ-MX10 can be used alone or together for video, audio, and title signals. Any one of eight colours can be selected as the background colour for video fade.

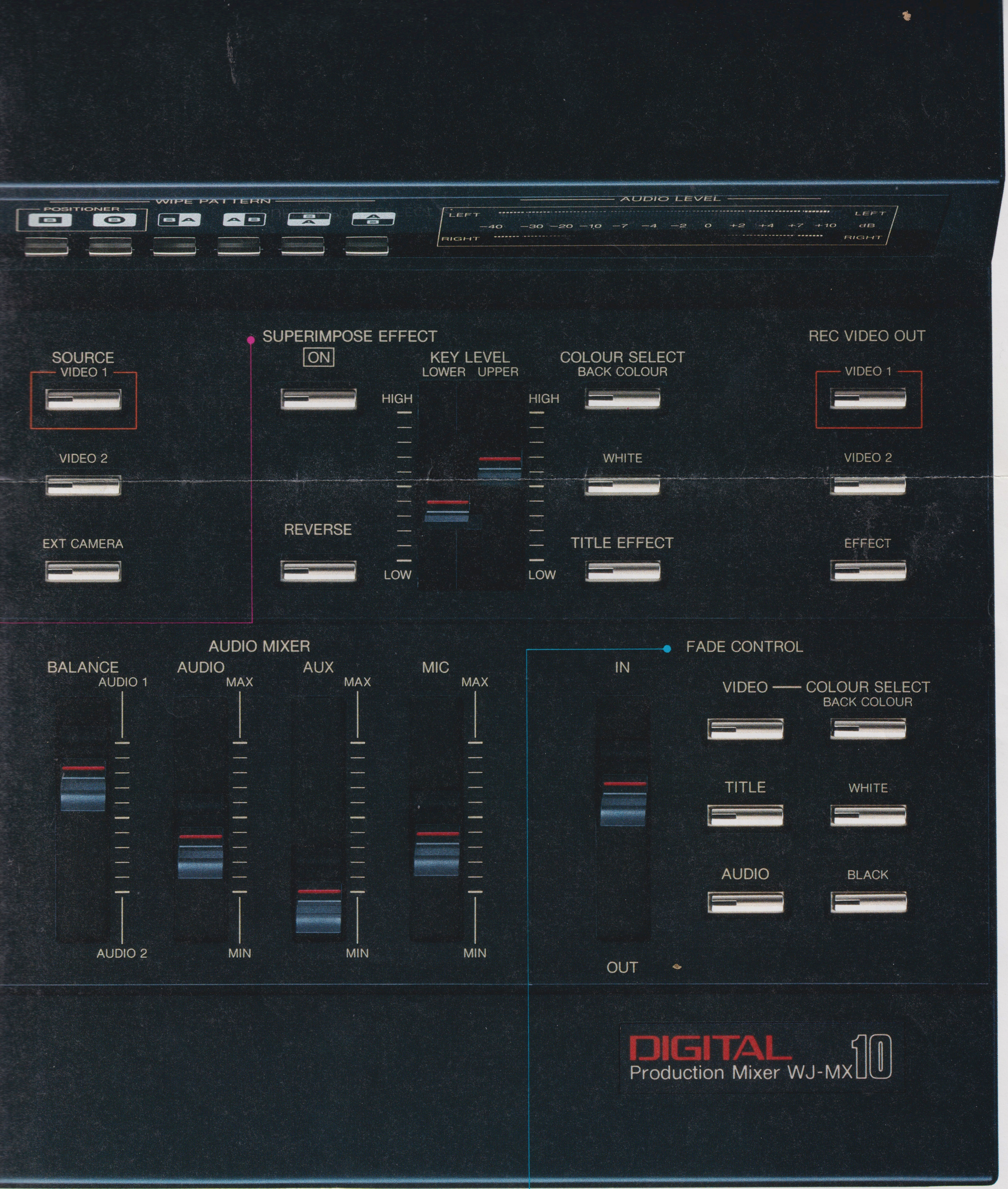

Fade-in
Fade-out
Panasonic
Panasonic
Panasonic


Panasonic
POWER
SYNC WARNING
INPUT MODE
BACK COLOUR
DIGITAL FRAME SYNCHRONIZER
ON
STILL
STROBE
MOSAIC
PAINT
MAGENTA
RED
BLUE
GREEN
BLACK
CYAN
YELLOW
WHITE
LARGE
HIGH
MIN
MAX
SMALL
LOW
POSITIONER
MIX WIPE EFFECT
MIX
VIDEO 1
VIDEO 2
BACK COLOUR
WIPE
VIDEO 1
VIDEO 2
BACK COLOUR
A
B

3 Wipe-mix effect

Because the WJ-MX10 has a built-in digital frame synchronizer, two different signals can be mixed and wiped even if they are not synchronized. Seventeen (17) different wipe effect screens can be obtained by combining the wipe selector buttons, and square or round wipe screens can be moved to any position on the TV screen with a joystick.




POSITIONER
WIPE PATTERN
AUDIO LEVEL
LEFT
−40 −30 −20 −10 −7 −4 −2 0 +2 +4 +7 +10 dB
RIGHT
SUPERIMPOSE EFFECT
ON
SOURCE
VIDEO 1
VIDEO 2
EXT CAMERA
REVERSE
KEY LEVEL
LOWER UPPER
HIGH
LOW
COLOUR SELECT
BACK COLOUR
WHITE
TITLE EFFECT
REC VIDEO OUT
VIDEO 1
VIDEO 2
EFFECT
AUDIO MIXER
BALANCE
AUDIO 1
AUDIO 2
AUDIO
AUX
MIC
MAX
MIN
FADE CONTROL
IN
OUT
VIDEO
COLOUR SELECT
BACK COLOUR
TITLE
WHITE
AUDIO
BLACK
DIGITAL
Production Mixer WJ-MX10

4 Fade control

The fade-in and fade-out functions of the WJ-MX10 can be used alone or together for video, audio, and title signals. Any one of eight colours can be selected as the background colour for video fade.

Fade-in
Fade-out